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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,385	07/16/2003	Gregory Emil Swize	TI-34162	1384

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EXAMINER

SLAVITT, MITCHELL R

ART UNIT	PAPER NUMBER
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2651

DATE MAILED: 05/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/604,385	Applicant(s) SWIZE, GREGORY EMIL	
	Examiner Mitchell R. Slavitt	Art Unit 2651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-16 and 33-48 is/are allowed.
- 6) ☒ Claim(s) 1, 17, 25, 49 and 50 is/are rejected.
- 7) ☒ Claim(s) 2-8, 18-24, 26-32 and 51-55 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/16/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 17, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Jeffrey et al. (Jeffrey). A digital state machine is taught in Fig 2, ref no 124. The state machine operates in the retract mode as taught at col 5, line 62 to col 6, line 32. Digital signals are output by the state machine (col 4, lines 34-45). The possible modes include startup, run, coast, and brake, thus being programmable in selected modes. See col 4, lines 18-24. The spindle motor control block in Fig 2, ref no 120, can control the current driving the spindle motor by a linear current control (analog signal). See col 5, lines 16-18. Using the linear current control, the support function block, Fig 2, ref no 130, monitors the supply voltage. When the supply voltage drops below a threshold level, the voltage monitor, Fig 2, ref no 133, sends a signal to the actuator retract block, Fig 2, ref no 131, indicating the head should be retracted to another area of the disk. See col 5, lines 38-67.

Claims 49-50 are rejected under 35 U.S.C. 102(e) as being anticipated by Tanner.

Regarding claim 49, Tanner teaches at col 2, lines 1-21, measuring a velocity of a VCM and establishing a voltage necessary to retract the head from the disk.

Regarding claim 50, Tanner teaches at col 1, lines 26-31, selectable operating modes being unloading or load operations of the head.

Allowable Subject Matter

3. Claims 9-16 and 33-40 are allowed as the prior art does not teach or suggest the applicant's invention. Independent claims 9 and 33 teach a retract circuit for retracting a transducer. The Examiner interprets the claims to fall within the provisions of 35 U.S.C. 112, 6th paragraph. Therefore the claims are construed to cover the corresponding structure, material, or acts described within the specification.

Claims 41-48 are allowed as the prior art does not teach or suggest the applicant's invention. Independent claim 41 teaches a system for moving a head to a retract position. The distinguishing elements of the claim are: a digital state machine defining a number of operating states, the digital state machine moving from state to state in response to conditions in the hard disk drive, and operating to produce digital command signals including a retract command to control the analog section to move the head assembly to the retract position, and a decoder and digital-to-analog converter to decode the digital command signals and convert the digital command signals to analog signals for controlling the analog section. Independent claim 49 teaches a method for retracting a head assembly.

Claims 2-8, 18-24, 26-32, and 51-55 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2651


Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mitchell R. Slavitt whose telephone number is (571) 272-7562. The examiner can normally be reached on M-F (6:30-4:00), 2nd Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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5/17/05


DAVID HUDSPETH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600